AMENDMENTS TO THE SPECIFICATION:

Page 1, please add the following new paragraphs before paragraph [0001]:

[0000.2] CROSS-REFERENCE TO RELATED APPLICATIONS

[0000.4] This application is a 35 USC 371 application of PCT/DE 2004/002554 filed on November 19, 2004.

[0000.6] BACKGROUND OF THE INVENTION

Please replace paragraph [0002] with the following amended paragraph:

[0002] The invention relates to a rotary leadthrough of a robot arm, in particular of a fourth axle of a Delta robot~~, as generically defined by the preamble to claim 1~~.

Page 2, please delete paragraphs [0007] and [0009].

Please add the following new paragraph after paragraph [0009]:

[0009.5] **SUMMARY OF THE INVENTION**

Page 3, please delete paragraph [0013].

Please replace paragraph [0014] with the following amended paragraph:

[0014] ~~Brief Description of the Drawings~~ **BRIEF DESCRIPTION OF THE DRAWINGS**

Please replace paragraph [0015] with the following amended paragraph:

[0015] The subject of the invention is described below in terms of a preferred exemplary embodiment, which is shown in the accompanying drawings**, in which:** ~~. Shown are:~~

Please replace paragraph [0016] with the following amended paragraph:

[0016] Fig. 1[[,]] **is** a perspective view of a **conventional** Delta robot;

Page 4, please replace paragraph [0019] with the following amended paragraph:

[0019] Fig. 4, a **top plan** view of the rotary leadthrough with the carrier plate of Fig. 2 from below;

Please replace paragraph [0023] with the following amended paragraph:

[0023] ~~Modes of Embodying the Invention~~

DESCRIPTION OF THE PREFERRED EMBODIMENTS

Please delete paragraph [0024].

Please replace paragraph [0025] with the following amended paragraph:

[0025] [[It]] **Except for the rotary leadthrough D described hereinafter, the Delta robot shown in Fig. 1 is equivalent to known Delta robots and** has a platelike basic element 1, on which three control arms 3 are supported so as to be pivotable or rotatable. The three control arms 3 can be moved individually by means of motors 2. The free ends of the control arms 3 are pivotably connected to a carrier element, in this case a carrier plate 5. The Delta robot also has a fourth axle 4, which is often telescoping or otherwise changeable in length. This fourth axle 4 is connected to the rotary leadthrough D via a joint 9, in particular a cardan joint or a universal joint. A grasping element, not shown, can be secured to the rotary leadthrough D on the side of the rotary leadthrough D diametrically opposite the fourth axle 4. The type of grasping element depends on the field in which it to be used. Examples of grasping elements are suction cups or clamping means. By means of the three control arms 3, the carrier plate 5 and thus the grasping element can be moved in three-dimensional space. The fourth axle 4 transmits a torque to the grasping element, so that the grasping element can furthermore be rotated purposefully about an axis.

Page 5, please replace paragraph [0026] with the following amended paragraph:

[0026] In Fig. 2, a rotary leadthrough [[D]] according to the invention is shown, secured to the carrier plate 5. This view is on a larger scale; the size of the rotary leadthrough can be selected to suit the size of the robot and the field of use, without altering the concept of the invention.

Please replace paragraph [0027] with the following amended paragraph:

[0027] The rotary leadthrough [[D]] has a housing 6 with an axial leadthrough 60. According to the invention, at least one opening, and here precisely two openings 61, 62 are present, which create a connection from the outside to the ~~radial~~ **axial** leadthrough 60 and are preferably located in the radial direction to the axial leadthrough [[60]].

Page 6, please replace paragraph [0031] with the following amended paragraph:

[0031] A shaft 7 is rotatably supported in the housing 6 and is located in and penetrates the axial leadthrough 60. This shaft serves on the one hand to provide connection to the fourth axle 4 and on the other to provide connection to the grasping element. As can be seen from Fig. 2, [[it]] **shaft 7** protrudes out of the [[duct]] **leadthrough** 60 with a sliding block 76 and a connection journal 74 on the side toward the carrier plate 5 and also protrudes past the carrier plate 5. Via the sliding block 76, a groove of the universal joint 9 can be displaced, causing the connection journal 74 to protrude into the universal joint 9. The fixation of this connection is done by means of a bolt or pin, which is [[past]] **passed** through a bore in the universal joint 9 and through a bore 75, aligned with it, of the connection journal 74. Preferably, an anchor-shaped fixation means, not shown here, is used, which has a resilient

curved element and a pin located on the curved element. The curved element can be fitted resiliently over the cylindrical body of the universal joint, whereupon the pin penetrates the bores.

Page 7, please replace paragraph [0032] with the following amended paragraph:

[0032] The shaft 7 is shown by itself in Fig. 3. It is preferably made from a lightweight material, such as an aluminum alloy. It has an axle 70, which on one end merges with a cylindrical head 72 that has an adjoining journal 74 and on the other end with a star-shaped securing element 71. As a result, as can be seen best from Figs. 5 through 7, the shaft, over at least a portion of its length, namely the length of its axle 70, has an outer diameter that is smaller than the inner diameter of the axial leadthrough 60. This creates a void, embodied as an annular gap R (see Figs. 5 through 7), into which the aforementioned radial leadthrough **openings** 61, 62 ~~protrudes~~ **lead**.

Page 8, please replace paragraph [0035] with the following amended paragraph:

[0035] The aforementioned radial openings now enable simple cleaning of the rotary leadthrough D, and in particular of the annular gap R, by means of a fluid medium, such as water, a cleaning solution, or compressed air. A first one of the openings 61 is a suction extraction opening, and a second opening 62 is an inflation **or flushing** opening. Preferably, the suction extraction opening 61 has a larger diameter than the inflation opening 62. Preferably, the two openings 61, 62 are also disposed at an angle of at least approximately 90° to one another. They may be located at the same height or at different heights.

Please add the following new paragraph after paragraph [0036]:

[0037] The foregoing relates to preferred exemplary embodiments of the invention, it being understood that other variants and embodiments thereof are possible within the spirit and scope of the invention, the latter being defined by the appended claims.

Please delete pages 9 and 10.